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## (54) Coin- or credit-freed amusement machine

(57) A coin-freed amusement or gaming machine has a display screen upon which an image of one or more footballers (9) can be displayed, with a football that they are playing with being blanked out. A player may operate controls to locate a marker on a point (11) or area of the screen where he thinks the football is. The machine then processes the information supplied and provides an indication (12) as to whether the selected point or area is co-incident with the actual position of the ball or within a predetermined area which contains the ball. Appropriate prizes may be awarded.



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PATENTS ACT 1977 P5621GB-NF/jsd

DESCRIPTION OF INVENTION

"Improvements in or relating to a credit-freed machine"

THE PRESENT INVENTION relates to a credit-freed machine, such as a coin or token-freed machine, or a machine freed by a magnetic or similar card comprising a prepayment card or a credit card. More particularly the invention relates to a machine that falls in the category of a gaming machine or an amusement with prizes machine, or a Lottery machine although it is to be understood that a machine in accordance with the invention need not actually award a prize and may thus solely provide amusement.

The invention seeks to provide a new machine of the type described.

According to this invention there is provided a coin, token or credit-freed amusement, amusement-with-prizes, Lottery machine or gaming machine, said machine comprising means to accept a coin, token or other credit to free the machine, a display screen, means to generate and display upon the display screen a pre-determined image, means to enable a player to select and identify at least one point in or area of the image, the machine further incorporating means to determine whether the selected point or area is at a pre-determined point or within a pre-selected area having regard to the image displayed, and means to provide an indication as to whether the selected point or area is

coincident with or within the pre-determined point or area.

Preferably the means to select and identify said point or area comprises means within the machine to generate a marker present upon the screen displaying the image, and manually operable means to move the marker to a point selected by the player and manually operable means to indicate when the marker is at the point selected by the player.

Conveniently the machine is adapted to provide an indicium, on the display at the point that the marker was located when the player activated said manually operable means to indicate that the marker is at the selected point, said indicium being displayed after the marker has been moved away from that selected point.

Advantageously the marker is movable by means of a joy-stick.

Alternatively the marker is movable by means of control buttons.

Preferably the manually operable means to indicate that the marker is at the selected point comprise a push-button.

In an alternative embodiment the means to enable a player to select and identify a point or area on the screen comprises a touch-sensitive screen upon which the image is displayed, or super-imposed upon the screen upon which the image is displayed so that the selected point or area may be indicated by touching the touch-sensitive screen.

Preferably the touch-sensitive screen is associated with a stylus.

Conveniently each point or area selected and identified is marked by an indicium.

Conveniently the machine is adapted so that, during a game cycle, a player may select and identify a pre-determined number of points or areas on the image.

Preferably the means to indicate whether the selected point or area is coincident with or within the pre-determined point or area comprises means to super-impose, upon the display, an indication representative of the pre-determined point or area.

Advantageously means are provided to display, after the pre-determined point or area has been displayed, a further pre-determined area, of larger size than the first displayed area.

The machine may be adapted to provide a prize if the selected and identified point or area is coincident with or within the pre-determined point or area.

The prize may comprise credits, which may be supplied to a credit meter, and/or the credits may be paid in terms of coins or tokens, or the credits may be utilised as credits on a further part of the machine, which comprises another game or the like.

preferably the machine is adapted to provide a pre-determined number of points or credits if the selected and identified area is coincident with or within the pre-determined point or area, and a lesser number of credits if the selected and identified point is adjacent the pre-determined point or area, within pre-determined limits.

Conveniently the image depicted is an image of a ball game in progress, the pre-determined point or area being the area occupied by the ball, the ball not being displayed in the image first presented to the player.

In order that the invention may be more readily understood, and so that further features thereof may be appreciated, the invention will now be described, by way of example, with reference to the accompanying drawings in which

FIGURE 1 is an illustration of a machine in accordance with the invention,

FIGURE 2 is a block diagram of the operative parts of the machine,

FIGURE 3 is a representative illustration of the screen of the machine at one stage during operation of the game,

FIGURE 4 is a representative illustration of the screen of the game at a subsequent stage in operation, and

FIGURE 5 is a further representation of the screen at a further stage during the game.

Referring initially to Figure 1 of the accompanying drawings a machine in accordance with the invention comprises a housing 1. The housing is provided with a slot 2 to receive coins or tokens, or to receive a magnetised pre-payment card or the like.

The housing contains a cathode ray display tube or monitor, having a screen 3 positioned to present an

image to a person playing the game. The game further includes control buttons 4 and a joy-stick 5. This embodiment of the game includes a pay-out hopper 6.

Referring now to Figure 2 of the drawings it can be seen that the housing 1 contains a micro-processor 7 which is associated with an appropriate memory 8 containing a programme to control the micro-processor to perform the functions about to be described. The micro-processor is also connected to the control buttons and the joy-stick, and the micro-processor is adapted to control the nature of the image displayed on the screen 3.

The memory 8 may be a replaceable or "plug-in" memory in the form of a pre-programmed ROM (ready only memory) so that the precise nature of the game may readily be changed.

Initially the game will be in an "attract" mode, displaying images on the screen indicating the nature of the game to be played.

When the apparatus has been freed, by inserting an appropriate coin, token or other "credit" in the slot 2, the micro-processor 7 then causes the screen 3 to display an image representative of players 9 playing a ball game such as, typically, football, although other ball games may be depicted. The image depicted does not include a ball. A typical image is shown in Figure 3. The object of the game is for the player to indicate where the ball is located.

The micro-processor then enables the joy-stick to be operated, by the person playing the game, to move a marker 10 displayed on the image to a position selected by the player. The player may then press one of the control buttons 4, causing the position of the

marker to be stored by the micro-processor. Thus the selected position is identified by the player. The player thus selects a point or area on the image where he believes the ball to be located. The marker 10 may then be moved to another selected position by the player. However, the position at which the marker was located when the button was pressed may then, on the displayed image, be indicated by indicium 11, such as a "X".

The player may utilise the joy-stick to move the marker 10 to a pre-determined number of different points, and may press the appropriate button 4 when the marker is at each point, thus marking each point with an indicium "X" 11. If desired, the player may press the control button two or more times when the marker is at one position, thus effectively super-imposing two or more indicium or "X"s on the screen.

When the player has operated the machine, in the manner described, to cause the screen to display a pre-determined number indicia or "X"s as shown in Figure 4, the micro-processor then causes the image shown on the screen to be altered, by super-imposing, upon the image, a circle 12 indicating the position occupied by the ball. If any one or more of the indicia 11 or "X"s is within that circle, then a pre-determined number of points or credits is awarded to the player. sequently the image displayed by the screen is again altered, so that the image then carries a circle, which is centred on the centre of the circle 12, but which has a radius which is bigger than the radius of the circle 12. If any one or more of the indicia 11 or "X"s is within this circle a further number of points or credits is awarded to the player, the number of points or credits being lesser than the number of points or credits if the ball was in the first circle.

Again the image presented by the screen changes, and a further circle, again centred on the ball, is depicted, again of larger radius. Again points are awarded for any indicia 11 or "X"s within this larger circle, the number of points or credits being less than on the previous occasion.

It will be appreciated that the micro-processor operates to determine if a point or area selected and identified by the player, and marked with an indicium 11 is at a pre-determined point, or within a pre-selected area, as indicated by the circle 12. the machine provides points or credits appropriately.

The points or credits awarded to the player may merely be displayed upon the screen, or upon a separate display provided for that purpose, if the machine is purely an amusement machine. Alternatively the points or credits may be stored in a credit meter contained within the machine. When a player has finished playing the machine he may be able to press an appropriate control button 4, causing a pay-out into the pay-out hopper equivalent to the total sum of the credits in the credit meter.

It is to be understood that in alternative embodiments a pay-out may be made to the pay-out hopper on every occasion when a player obtains credits during a game.

It is to be appreciated that many modifications may be made to the invention without departing from the scope of the invention as defined by the following Claims. For example, in a modified embodiment of the invention, credits obtained in playing the game may be utilised subsequently in playing another game incorporated in the machine, such as a "fruit machine" game.

Alternatively a game, such as a "fruit machine" game or other similar game may be played initially, credits or points scored during the "fruit machine" game being utilised to activate the game in accordance with the invention.

Whilst the invention has been described with reference to an embodiment in which the marker on the screen is moved by means of a joy-stick, it is to be appreciated that the marker on the screen may be moved by a plurality of control buttons, depression of the buttons causing movement of the marker upwards, downwards, to the left and to the right respectively. In a further modified version of the machine the marker may be moved by a device such as a "mouse".

It will be appreciated that the purpose of the marker is to identify areas of the screen selected by the player. This can, of course, be achieved in other ways, for example by utilising a touch-sensitive screen, so that the player may identify the selected areas of the screen simply by touching the selected areas either with a finger or with a stylus provided for that purpose.

It will be appreciated that the number of regions of screen to be selected and indicated by a player may be any appropriate number, but five or six is felt to be a number that will be found to be satisfactory for most applications.

It is envisaged that modified embodiments of the game may provide a player with an opportunity to "gamble" for example by placing a selected number of credits on each attempt to indicate the correct area of the screen where the ball is located. In such a machine, for example, if in an ordinary game the machine awards 100 credits if an indicia 11 or "X" is within the first circle displayed at the end of the game, if a player indicates that 10 credits are to be accorded to each attempt, and the player manages to predict accurately the position of the ball, then the player will obtain 1,000 credits.

The images to be displayed may be pre-recorded images or computer generated images. The memory 8 will enable a large number of images to be generated. The memory 8 may be programmed so that the position of the ball is the same each time a particular image is generated and displayed, or may be such that the position of the ball varies on each subsequent showing of a particular image, to prevent players becoming familiar with the position of the ball for specific images.

In any event the memory 8 may be removed and replaced from time-to-time, thus providing the machine with a totally new set of images.

The micro-processor may be pre-programmed so that if, during a game, a player does not move the marker, and/or operate the button to select and identify an area of the image, within a pre-determined period of time, the micro-processor will itself move the marker and effectively select and identify an area of the image, to prevent a single player taking an excess amount of time to play a game.

CLAIMS:

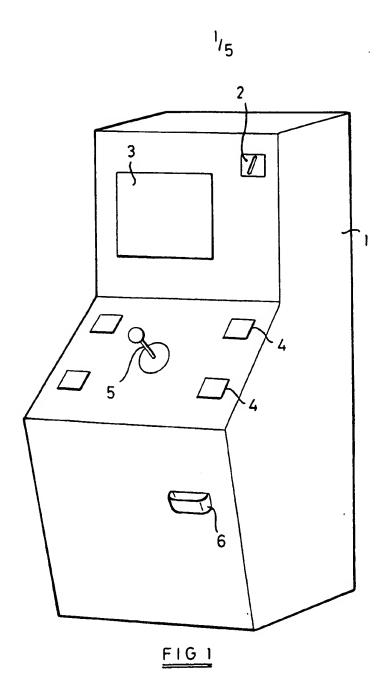
- 1. A coin, token or credit-freed amusement, amusement-with-prizes, lottery or gaming machine, said machine comprising means to accept a coin, token or other credit to free the machine, a display screen, means to generate and display upon the display screen a pre-determined image, means to enable a player to select and identify at least one point in or area of the image, the machine further incorporating means to determine whether the selected point or area is at a pre-determined point or within a pre-selected area having regard to the image displayed, and means to provide an indication as to whether the selected point or area is coincident with or within the pre-determined point or area.
- 2. An apparatus according to Claim 1 wherein the means to select and identify said point or area comprises means within the machine to generate a marker present upon the screen displaying the image, and manually operable means to move the marker to a point selected by the player and manually operable means to indicate when the marker is at the point selected by the player.
- A machine according to Claim 2 wherein the machine is adapted to provide an indicium, on the display at the point that the marker was located when the player activated said manually operable means to indicate that the marker is at the selected point, said indicium being displayed after the marker has been moved away from that selected point.
- 4. A machine according to Claim 2 or 3 wherein the marker is movable by means of a joy-stick.

- 5. A machine according to Claim 2 or 3 wherein the marker is movable by means of control buttons.
- 6. A machine according to any one of Claims 2 to 5 wherein the manually operable means to indicate that the marker is at the selected point comprise a push-button.
- 7. A machine according to Claim 1 wherein the means to enable a player to select and identify a point or area on the screen comprises a touch-sensitive screen upon which the image is displayed, or super-imposed upon the screen upon which the image is displayed so that the selected point or area may be indicated by touching the touch-sensitive screen.
- 8. A machine according to Claim 7 wherein the touch-sensitive screen is associated with a stylus.
- 9. A machine according to Claim 7 or 8 wherein each point or area selected and identified is marked by an indicium.
- 10. A machine according to any one of the preceding Claims adapted so that, during a game cycle, a player may select and identify a pre-determined number of points or areas on the image.
- A machine according to any one of the preceding Claims wherein the means to indicate whether the selected point or area is coincident with or within the pre-determined point or area comprises means to super-impose, upon the display, an indication representative of the pre-determined point or area.
- 12. A machine according to Claim 11 wherein means are provided to display, after the pre-determined point

or area has been displayed, a further pre-determined area, of larger size than the first displayed area.

- 13. A machine according to any one of the preceding Claims, adapted to provide a prize if the selected and identified point or area is coincident with or within the pre-determined point or area.
- 14. A machine according to Claim 13 wherein the prize comprises credits.
- 15. A machine according to Claim 14 wherein the credits are supplied to a credit meter.
- 16. A machine according to Claim 14 wherein the credits are paid in terms of coins or tokens.
- 17. A machine according to Claim 14 wherein the credits are utilised as credits on a further part of the machine, which comprises another game or the like.
- 18. A machine according to any one of Claims 13 to 17 wherein the machine is adapted to provide a pre-determined number of points or credits if the selected and identified area is coincident with or within the pre-determined point or area, and a lesser number of credits if the selected and identified point is adjacent the pre-determined point or area, within pre-determined limits.
- 19. A machine according to any one of the preceding Claims wherein the image depicted is an image of a ball game in progress, the pre-determined point or area being the area occupied by the ball, the ball not being displayed in the image first presented to the player.

- 20. A machine substantially as herein described with reference to and as shown in the accompanying drawings.
- 21. Any novel feature or combination of features disclosed herein.





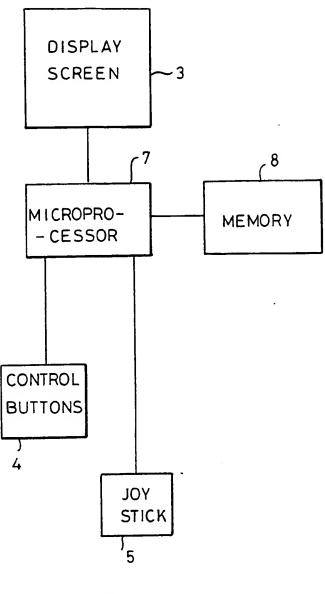


FIG 2

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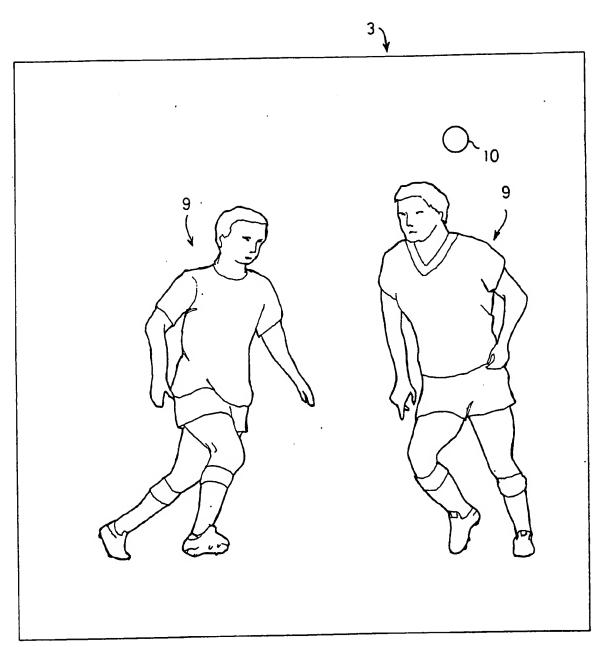


FIG 3

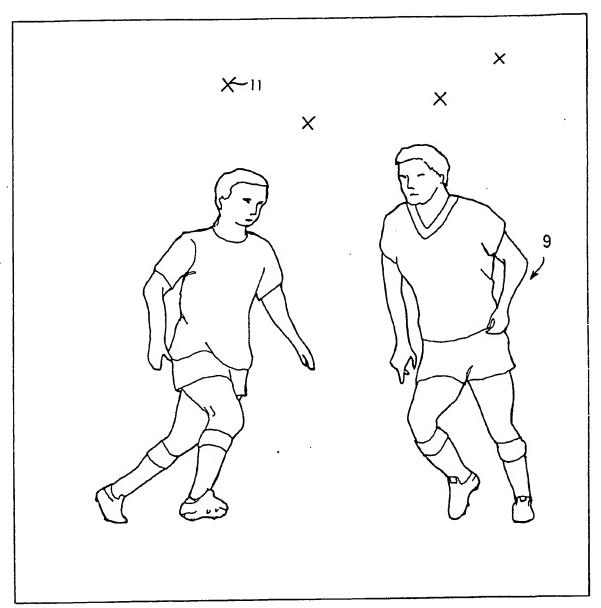
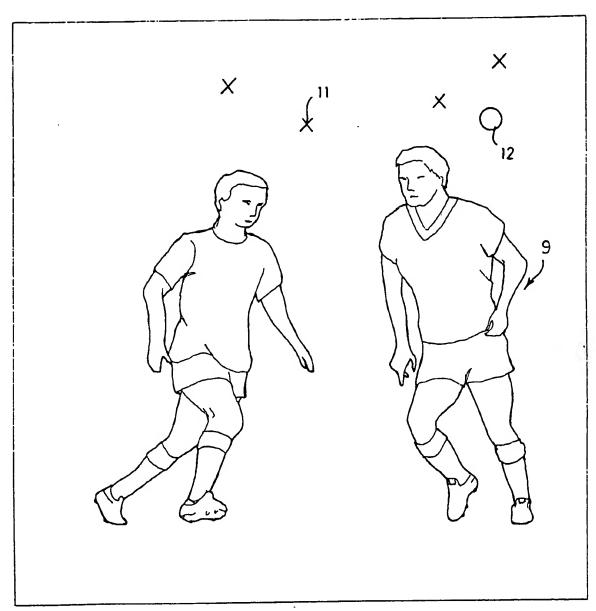


FIG 4



<u>FIG 5</u>